## **ABSTRACT**

A process for the preparation of tetrahydrothieno[3,2-c]pyridine derivatives of the general formula 6:

$$X$$
 $CI$ 
 $Z$ 

6

or their pharmaceutically acceptable salts, wherein the meaning of X is carboxyl, alkoxycarbonyl, aryloxycarbonyl, or carbamoyl of formula

$$\overset{O}{\underset{C}{--}}\overset{II}{\underset{C}{--}}\overset{R_{1}}{\underset{R_{2}}{--}}$$

wherein R<sub>1</sub> and R<sub>2</sub> can be individually or simultaneously hydrogen, alkyl or part of a heterocyclic structure; Z can be hydrogen, halogen, alkyl, aryl, aryloxy or alkoxy group, the process comprising conducting a dehydroxylation reaction on the compound of formula 5 in order to obtain a compound of formula 6, wherein said dehydroxylation reaction is effected by iodosilane represented by the formula Si(R<sub>3</sub>)<sub>3</sub>I, wherein R<sub>3</sub> selected from an alkyl, alkenyl, alkynyl, aromatic group, or combinations of thereof.

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